NPIC/R-5139/64
December 1964

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PHOTOGRAPHIC INTERPRETATION REPORT

TCS-10661/64
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13 Pages

SAM LAUNCH COMPLEX KAPUSTIN YAR/VLADIMIROVKA MISSILE TEST CENTER, USSR SEPTEMBER 1964

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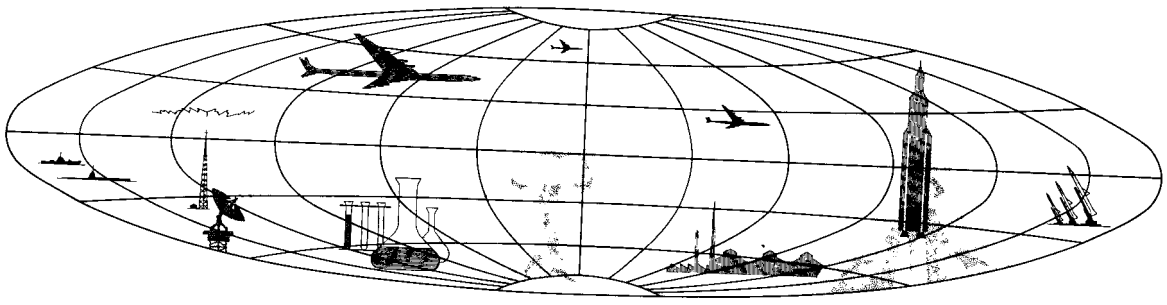

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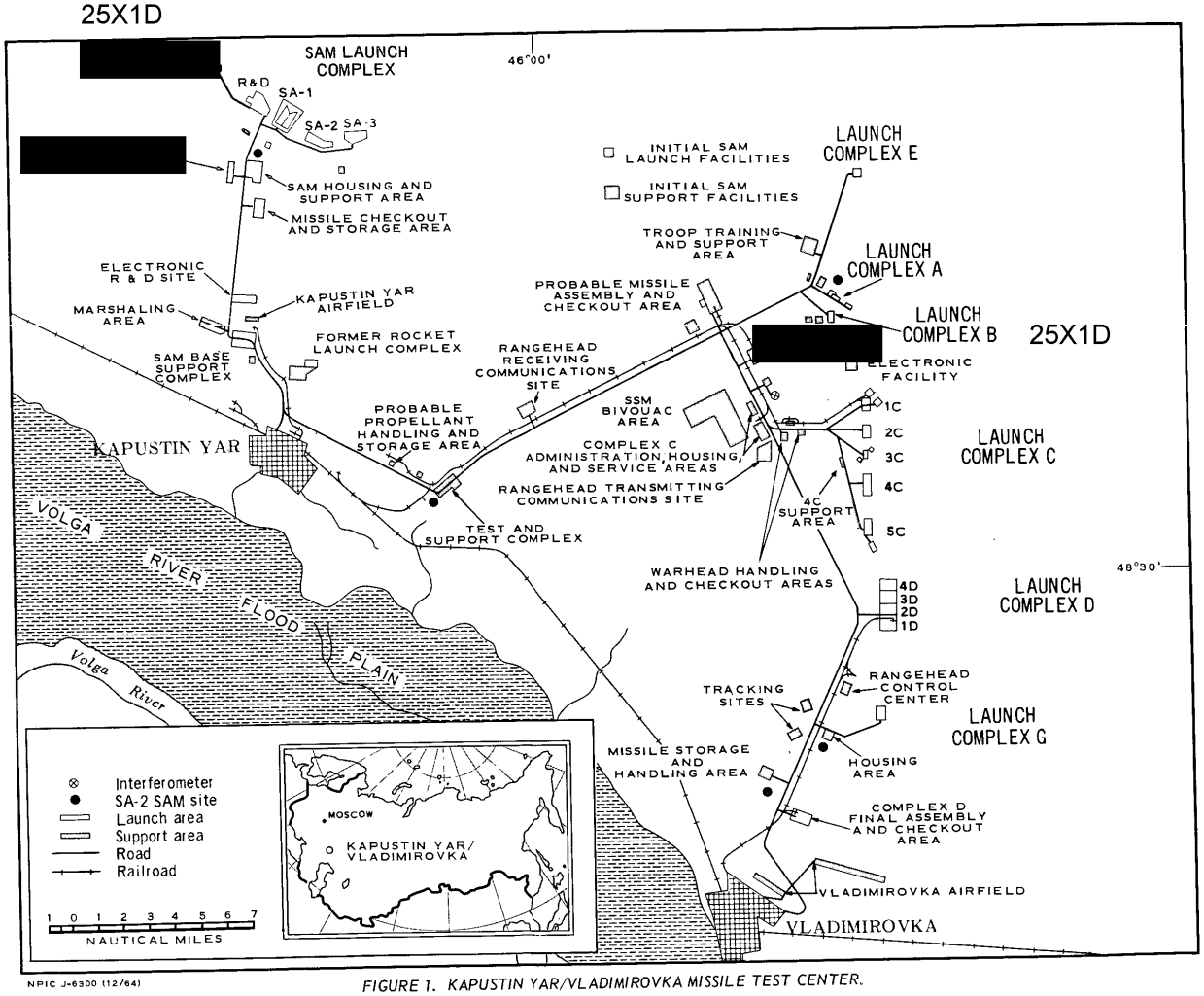
NATIONAL PHOTOGRAPHIC INTERPRETATION CENTER

25X1D

25X9



NPIC J-6300 (12/64)

FIGURE 1. KAPUSTIN YAR/VLADIMIROVKA MISSILE TEST CENTER.

TCS-10661/64
NPIC/R-5139/64

PREFACE

This report has been prepared in response to CIA requirement C-SI4-81,848, which requests an analysis of surface-to-air missile (SAM) facilities at the Kapustin Yar/Vladimirovka Missile Test Center (KY/VMTC) based on KEYHOLE photography of [redacted] Information is presented herein on 9 of the KY/VMTC SAM facilities (Figure 1) and updates material in 2 earlier reports, PIC/JR-1008/61 1/ and NPIC/R-126/63. 2/ The former report presented a detailed analysis of the KY/VMTC SAM facilities based on TALENT photography of [redacted] and the latter furnished information on the facilities based on KEYHOLE coverage through [redacted]

25X1D
25X1D
25X1D
25X1D
25X1D

In those instances where the stated measurements in the present report differ from those in the referenced reports 1-5/, the mensuration in this report should be utilized. It is believed that the mensural data herein can be regarded as accurate to within plus-or-minus 10 percent for heights and plus-or-minus 5 percent for horizontal measurements.*

[redacted]

25X1D

25X1D

INTRODUCTION

Several significant changes at the KY/VMTC SAM facilities have occurred since the [redacted] KEYHOLE coverage. The most significant have occurred at the SA-3 launch area, the electronic research and development site, and the new, unidentified facility near the SAM R&D launch area. Since all 3 areas have been reported on relatively recently 3-5/, only the changes which have not yet been set forth in a detailed NPIC report will be described here. Other developments at the SAM Launch Complex include new construction at the SAM base support complex and the missile checkout and storage area, and the elimination of Site D of the SA-2 launch area. No significant changes have been noted at the SA-1 launch area and associated YO-YO guidance facility, the SAM [redacted] or the downrange instrumentation sites.

25X9

SA-1 LAUNCH AREA

The SA-1 launch area (Figure 2) has continued through [redacted] to appear active. On the [redacted] photography, 5 unidentified objects were observed on the roads between launch points, at positions where missile transporters or dollies are normally parked at SA-1 launch areas. The small scale of KH-4 photography, the only KEYHOLE coverage of the KY/VMTC SAM Launch Complex, precludes identification of launchers/erectors at the launch points. However, 60 launchers/erectors were identified at the launch area on earlier, TALENT

25X1D
25X1D

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25X1D

FIGURE 2. SA-1 LAUNCH AREA, [redacted] 25X1D

25X1D

25X1D

photography. [redacted] of the launch areas of the Moscow SA-1 sites has revealed that SA-1 launchers/erectors are permanent, and it is believed that a noticeable amount of excavating would be necessary to remove them. Since no such excavating has been observed at the KY/VMTC SA-1 launch area on any available KH-4 or TALENT coverage, it can be assumed that the launchers/erectors are still in place there.

The only change observed at the YO-YO guidance facility associated with the launch area is the addition of a building approximately 115 by 30 feet. This building was first observed under construction in [redacted] 25X1D
[redacted], and could be considered complete on [redacted] 25X1D
[redacted] 25X1D
25X1D

SA-2 LAUNCH AREA

25X1D [redacted] this area (Figure 3) consisted of SAM Sites A-D and one confirmed and one possible bivouac site.

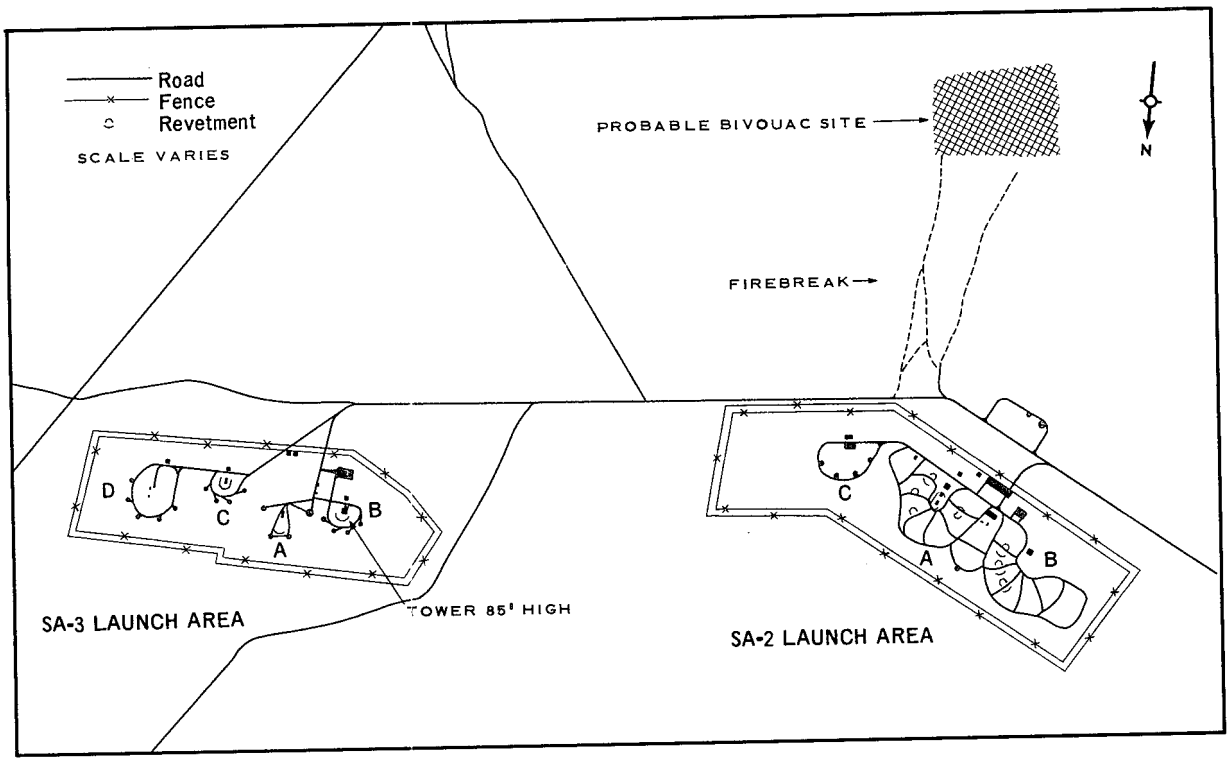
SAM Site D, reported to be under construction in NPIC/R-126/63 2/, has been overgrown by vegetation. Sites A and B, permanent SA-2 training sites, continue to be unoccupied --
25X1D no vehicles, vans, or pieces of equipment could be observed in their area in [redacted] On the basis of more complete information from photography, it has been concluded that Site C is not a prototype of an SA-0 site. The actual function of Site C cannot be determined. It may be worth pointing out, however, that if the site is graphically superimposed on either of the fan-configuration SA-2 sites, it fits adequately into either, a fact which would seem to suggest that Site C is a permanent SA-2 training site. 25X1D

A new, probable bivouac site has appeared 25X1D
since [redacted]. It was first observed in [redacted] 25X1D
[redacted] and has continued through [redacted] to 25X1D
show signs of activity. The confirmed and the possible bivouac sites identified in [redacted] 25X1D
have both been overgrown by vegetation. The 25X1D
confirmed site showed signs of inactivity in [redacted] 25X1D
[redacted] and by [redacted] had been over- 25X1D
grown; the possible site showed signs of inactivity in [redacted] had 25X1D
been overgrown.

SA-3 LAUNCH AREA

25X1D The SA-3 launch area (Figure 3) has shown
25X1D no significant expansion or additions since [redacted]
[redacted] except that a tower, probably latticed, has been added at SAM Site B. The tower first ap-
25X1D peared in [redacted] and
25X1D could be negated on [redacted]
25X1D [redacted]. In [redacted]
25X1D [redacted] the launch positions of the site were unoccu-
25X1D pied, and the tower appeared possibly to have one or more unidentified pieces of equipment on it. The height of the tower has been newly determined to be 85 feet. The earlier height measurement of 30 feet probably was the result of the poor imagery of the photography [redacted] 25X1D
[redacted] and the poorly defined shadow cast by 25X1D
the tower. However, it is also possible that an increase in actual tower height and/or the presence of equipment on the tower is partially responsible for the increased height measurement.

The [redacted] coverage also revealed 25X1D
a number of vehicles or pieces of equipment



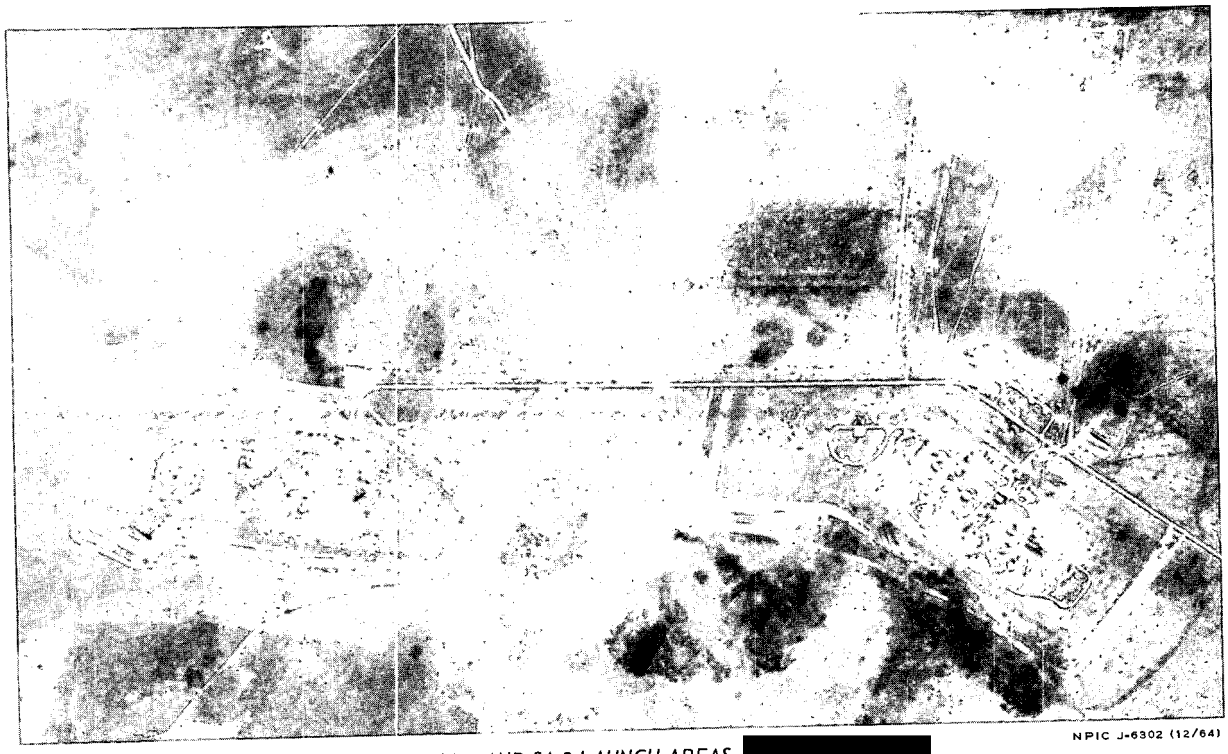


FIGURE 3. SA-2 AND SA-3 LAUNCH AREAS, [redacted]

25X1D

in the launch revetments and/or guidance areas of the other sites (A, C, and D) in the launch area. Scarring between Sites A and B has 25X1D been noted since [redacted] but no function for it can be determined.

All 4 sites are oriented on a firing azimuth of approximately 350 degrees.

ELECTRONIC RESEARCH AND DEVELOPMENT SITE

Analysis of the electronic research and development site (Figure 4) since preparation of NPIC/R-802/64 4/ has provided the following information. New mensuration of the Leningrad-type elevated platform shows it to be 150 feet in diameter and 65 feet above the ground. The small circular tower centrally located on the platform is 25 feet in diameter and 30 feet high. The large, open hardstand near the platform has been expanded. Three possible, unidentified antennas and several other pieces of equipment or vehicles are visible on this 25X1D hardstand on [redacted] coverage. The presence of a parabolic dish on the other elevated platform (situated approximately 4,150 feet west of the Leningrad-type platform) has been negated. [redacted] can be discerned on this platform, but the small scale of the photography limits analysis of their function. The height of this platform has been newly determined to be 70 feet. The presence of objects on the platform may be partially responsible for the apparently increased height. 25X1D

An area designated formerly 4/ as the location of open storage can now be identified as a building 140 by 45 feet.

25X9 [redacted]

MISSILE CHECKOUT AND STORAGE AREA

25X1D

The missile checkout and storage area (Figure 6) at the KY/VMTC has continued to expand 25X1D since [redacted]

The revetment reported earlier as probable 25X1D 2/ is now confirmed, and between [redacted] a 45- by 25-foot building was constructed within it. Another revetment was added 25X1D between [redacted], and a 35- by 30-foot building was constructed within it 25X1D between [redacted]. A third, possible revetment, which was not present in [redacted] could be identified on [redacted] 25X1D coverage. This revetment had not changed sufficiently by [redacted] for it to be evaluated as probable or confirmed. 25X1D

The 250-foot-diameter unidentified area outside the northwest perimeter of the missile checkout and storage area has been allowed to return to vegetation.

[redacted]

25X1B

25X1B FIGURE 4. ELECTRONIC RESEARCH AND DEVELOPMENT SITE [redacted] 25X1D

[redacted]

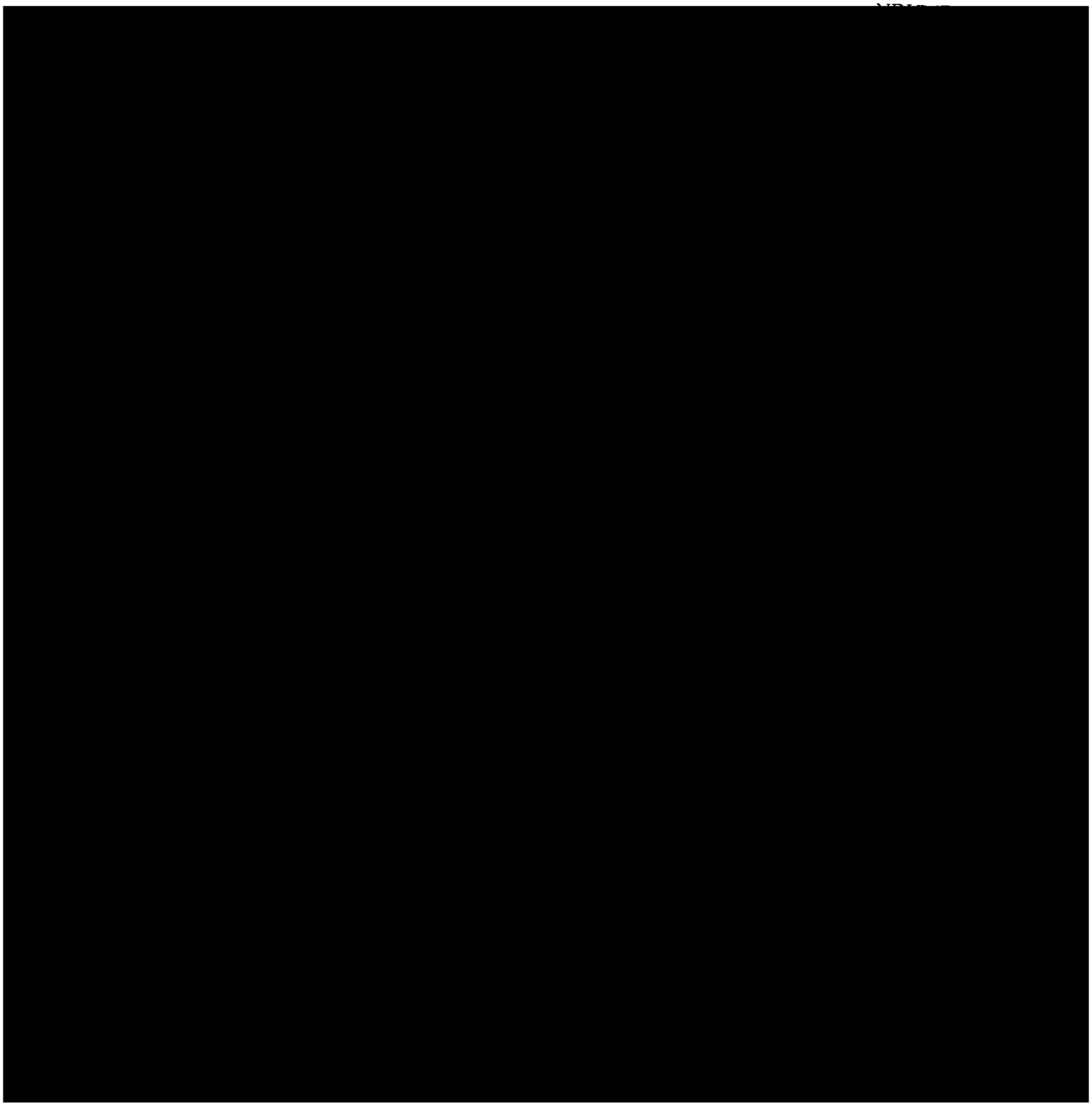
SAM BASE SUPPORT COMPLEX

BASE SUPPORT AND HOUSING AREA

25X1D No new sections have been added in this area (Figure 8) since [redacted] Of the 4 sections -- the base support, housing, and possible storage sections and the transloading site -- only the base support section shows significant change since [redacted] Four buildings were added there between [redacted] and one between [redacted] the others between [redacted]

25X1D
25X1D
25X1D
25X1D
25X1D

25X9



MARSHALING AREA

No new buildings, aprons, or other facilities have been added at the SAM marshaling area (Figure 8) since [redacted] Very little activity is observed on the aprons on [redacted] photography, compared with that on [redacted] coverage. The small scale of the photography continues to preclude identification of the vehicles/pieces of equipment in the area.

25X1D

25X1D

25X1D

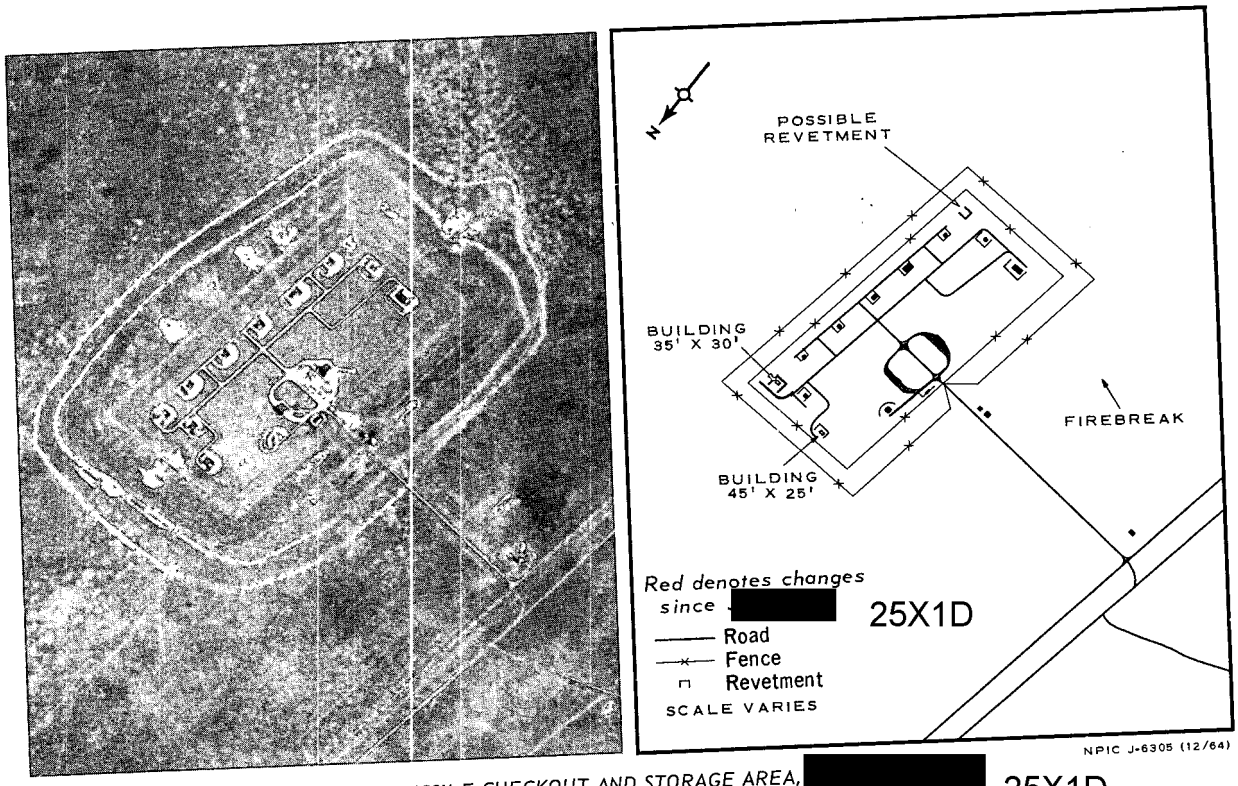


FIGURE 6. MISSILE CHECKOUT AND STORAGE AREA, [redacted] 25X1D

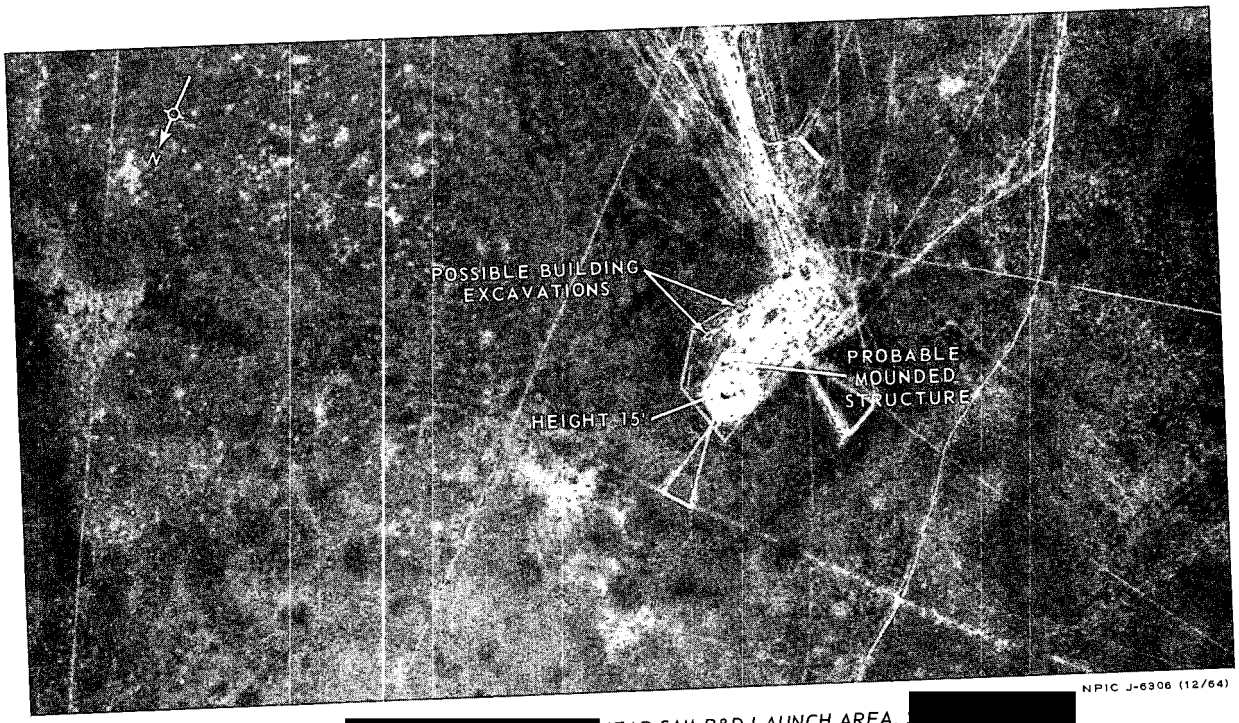


FIGURE 7. NEW, [redacted] NEAR SAM R&D LAUNCH AREA, [redacted]

25X1D

25X1D

NPIC J-6307 (12/64)

FIGURE 8. SAM BASE SUPPORT COMPLEX, [redacted] 25X1D

25X1D

[redacted]

MAPS OR CHARTS

ACIC. US Air Target Chart, Series 200, Sheet 0235-17A, 2d ed, Feb 60, scale 1:200,000 (SECRET)

ACIC. US Air Target Chart, Series 200, Sheet 0235-22HL, 4th ed, May 63, scale 1:200,000 (SECRET)

DOCUMENTS

1. CIA. PIC/JR-1008/61, *Surface-to-Air Missile Facilities, Kapustin Yar/Vladimirovka Missile Test Center, USSR,* [redacted] (SECRET/Noforn [redacted] (Downgrading Prohibited)) 25X1D 25X1C
2. NPIC. R-126/63, *Surface-to-Air Missile Facilities, Kapustin Yar/Vladimirovka Missile Test Center, USSR, Changes* [redacted] (TOP SECRET CHESS RUFF) 25X1D
3. NPIC. R-862/64, *SA-3 SAM Site Towers, Kapustin Yar/Vladimirovka Missile Test Center and Leningrad Area, USSR,* [redacted] (TOP SECRET RUFF) 25X1D
4. NPIC. R-802/64, *Electronic Research and Development Site, Kapustin Yar/Vladimirovka Missile Test Center, USSR,* [redacted] TOP SECRET CHESS RUFF) 25X1D
5. NPIC. R-622/64, *New,* [redacted] *at Kapustin Yar/Vladimirovka Missile Test Center, USSR,* [redacted] (TOP SECRET RUFF) 25X1D 25X1D

REFERENCES (Continued)

REQUIREMENT

CIA. C-SI4-81,848

NPIC PROJECT

11785/64